

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A photoelectric conversion element, comprising:
an electrode substrate, which includes:
 - a base material;
 - ~~a metal circuit layer~~ a transparent conductive layer which is provided on the base material; and
 - ~~a transparent conductive~~ a metal circuit layer which is ~~electrically connected to~~ formed on the transparent conductive layer,
 - wherein the metal circuit layer is covered by an insulating layer;
 - an oxide semiconductor porous film provided on a side of the electrode substrate where the transparent conductive layer is provided;
 - a sensitizing dye provided in the oxide semiconductor porous film;
 - a counter electrode, which has a different constitution from the electrode substrate and ~~which is formed of a film made of a conductive material formed on a substrate~~, and which is placed facing the oxide semiconductor porous film; and
 - an electrolyte layer or charge transfer layer, ~~which is adjacent to the oxide semiconductor porous film,~~ and which is provided between the counter electrode and the electrode substrate above which the oxide semiconductor porous film is formed, wherein

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the transparent conductive layer contacts the metal circuit layer inside of the insulating layer and the transparent conductive layer contacts an electrolyte solution via the oxide semiconductor porous film outside of the insulating layer.

2. (previously presented): The photoelectric conversion element according to claim 1, wherein the insulating layer comprises a material that includes a glass component.

3-5. (canceled).

6. (currently amended): A dye-sensitized solar cell comprising:
an electrode substrate, which includes:
a base material;
~~a metal circuit-a transparent conductive layer which is provided on the base material; and~~
~~a transparent conductive-a metal circuit layer which is electrically connected to the metal circuit layer formed on the transparent conductive layer,~~
wherein the metal circuit layer is covered by an insulating layer,
an oxide semiconductor porous film ~~that is~~ provided on a side of the electrode substrate where the transparent conductive layer ~~side~~ is provided;
a sensitizing dye provided in the oxide semiconductor porous film;
~~a counter electrode, which has a different constitution from the electrode substrate and which is formed of a film made of a conductive material formed on a substrate, and which is placed facing the oxide semiconductor porous film; and~~

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an electrolyte layer or charge transfer layer, which is adjacent to the oxide semiconductor porous film, and which is provided between the counter electrode and the electrode substrate above which the oxide semiconductor porous film is formed, wherein the transparent conductive layer contacts the metal circuit layer inside of the insulating layer and the transparent conductive layer contacts an electrolyte solution via the oxide semiconductor porous film outside of the insulating layer.

7-26. (canceled).

27. (currently amended): A photoelectric conversion element, comprising:
an electrode substrate, which includes:
a base material;
~~a metal circuit~~ a transparent conductive layer which is provided on the base material; and
~~a transparent conductive~~ a metal circuit layer which is electrically connected to the metal circuit layer formed on the transparent conductive layer,
wherein the metal circuit layer is covered and insulated by an insulating layer which includes a heat-resistant ceramic as a main component,
an oxide semiconductor porous film provided on a side of the electrode substrate where the transparent conductive layer is provided;
a sensitizing dye provided in the oxide semiconductor porous film;

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a counter electrode, which has a different constitution from the electrode substrate and
~~which is formed of a film made of a conductive material formed on a substrate~~, and which is placed facing the oxide semiconductor porous film; and
an electrolyte layer or charge transfer layer, ~~which is adjacent to the oxide semiconductor porous film~~, and which is provided between the counter electrode and the electrode substrate above which the oxide semiconductor porous film is formed, wherein
the transparent conductive layer contacts the metal circuit layer inside of the insulating layer and the transparent conductive layer contacts an electrolyte solution via the oxide semiconductor porous film outside of the insulating layer.

28. (previously presented): The photoelectric conversion element according to claim 27, wherein the heat-resistant ceramic contains at least one of alumina, zirconia, and silica.

29. (previously presented): The photoelectric conversion element according to claim 27, wherein the insulating layer contains at least one of silicate, phosphate, colloidal silica, alkyl silicate, and metal alkoxide.

30-33. (canceled).

34. (currently amended): A dye-sensitized solar cell comprising:

an electrode substrate, which includes:

a base material;

~~a metal circuit-a transparent conductive layer which is provided on the base material; and~~

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a transparent conductive a metal circuit layer which is electrically connected to
the metal circuit layer formed on the transparent conductive layer,

wherein the metal circuit layer is covered and insulated by an insulating layer
which includes a heat-resistant ceramic as a main component,

an oxide semiconductor porous film provided on a side of the electrode substrate where
the transparent conductive layer side is provided;

a sensitizing dye provided in the oxide semiconductor porous film;

a counter electrode, which has a different constitution from the electrode substrate and
which is formed of a film made of a conductive material formed on a substrate, and which is
placed facing the oxide semiconductor porous film; and

an electrolyte layer or charge transfer layer, which is adjacent to the oxide semiconductor
porous film, and which is provided between the counter electrode and the electrode substrate
above which the oxide semiconductor porous film is formed, wherein

the transparent conductive layer contacts the metal circuit layer inside of the insulating
layer and the transparent conductive layer contacts an electrolyte solution via the oxide
semiconductor porous film outside of the insulating layer.